

We claim:

1. An induction bondable high-pressure laminate construction having an exposed upper surface and a lower bonding surface comprising, in the following sequence, a) a decorative layer, b) a core layer and c) a susceptor layer, said susceptor layer being capable of absorbing electromagnetic energy.
2. The high-pressure laminate of claim 1 wherein the laminate core comprises multiple layers of resin-impregnated sheet materials, said sheet materials being paper materials, fabric materials, or a combination of paper material and fabric material.
3. The high-pressure laminate of claim 2 wherein the resin is selected from the group consisting of phenolic resins, melamine resins, resorcinolic resins, and urea resins.
4. The high-pressure laminate of claim 2 wherein the sheet material is a paper material paper.
5. The high-pressure laminate of claim 4 wherein the paper material is Kraft paper.
6. The high-pressure laminate of claim 1 wherein the decorative layer is comprised of the same material as the core layer and has the same or a different surface appearance than the surface of the core layer.
7. The high-pressure laminate of claim 6 wherein the decorative layer has a different surface appearance than the surface of the core layer.
8. The high-pressure laminate of claim 1 wherein the decorative layer is comprised of a material different from that used to construct the core layer.
9. The high-pressure laminate of claim 8 wherein the decorative layer is a melamine impregnated layer.
10. The high pressure laminate of claim 1 wherein the decorative layer further comprises a protective overlayer.
11. The high-pressure laminate of claim 1 wherein the decorative layer comprises a metal foil.
12. The high-pressure laminate of claim 1 wherein the susceptor layer comprises an electromagnetic energy absorbing material selected from the group consisting of a non-perforated metallic foil, a perforated metallic foil, a metallic mesh, metallic fibers, carbon fibers and a polymer material having dispersed therein electromagnetic energy absorbing particles.

13. The high-pressure laminate of claim 12 wherein the susceptor layer further comprises a support layer to which the electromagnetic energy absorbing material is bonded.
14. The high-pressure laminate of claim 13 wherein the support layer is a heat insulating layer and is intermediate the electromagnetic energy absorbing material and the core layer.
15. The high-pressure laminate of claim 13 wherein the support layer is selected from the group consisting of paper, tissue, non-woven scrim, and polymer films.
16. The high-pressure laminate of claim 1 wherein a preformed high-pressure laminate is made comprising the decorative layer and the core layer and the susceptor layer is bonded to the preformed laminate.
17. The high pressure laminate of claim 16 wherein the susceptor layer further comprises a pre-applied heat responsive adhesive overlaying all or a part of the susceptor layer, in heat transfer relationship with the susceptor layer, said adhesive applied to the surface of the susceptor layer opposite the surface bonded to the preformed laminate.
18. The high-pressure laminate of claim 17 wherein the heat responsive adhesive is selected from the group consisting of heat activated adhesives, heat reactive hot-melt adhesive and hot-melt adhesives.
19. The high-pressure laminate of claim 16 wherein susceptor layer comprises a heat responsive adhesive material having incorporated therein an electromagnetic energy absorbing material.
20. The high-pressure laminate of claim 19 wherein the adhesive material is a heat activated adhesives, heat reactive hot-melt adhesive and hot-melt adhesives and the electromagnetic energy absorbing material is a particulate material selected from the group consisting of ferrites, metallic flakes, chopped metallic fibers, chopped carbon fibers, carbon black powder, and metallic powder.
21. The high pressure laminate of claim 1 wherein a preformed high-pressure laminate is made comprising the decorative layer, the core layer and the susceptor layer such that the susceptor layer is incorporated into the preformed laminate.
22. The high-pressure laminate of claim 21 further comprising a heat insulating layer intermediate the core layer and the susceptor layer.

23. The high-pressure laminate of claim 21 wherein the preformed laminate further comprises a lower bonding surface made up of one or more layers of a resin-impregnated sheet material, said lower bonding surface being heat transmissive and in a heat transfer relationship with the susceptor layer, opposite the core layer.
24. The high-pressure laminate of claim 21 further comprising a pre-applied heat responsive adhesive, in heat transfer relationship with the susceptor layer, said adhesive applied to the surface of the preformed laminate opposite the exposed upper surface.
25. The high-pressure laminate of claim 24 wherein the heat responsive adhesive is selected from the group consisting of heat activated adhesives, heat reactive hot-melt adhesive and hot-melt adhesives.
26. The high-pressure laminate of claim 1 wherein the susceptor layer is a discontinuous layer comprising a plurality of discrete susceptors, each comprising an electromagnetic energy absorbing material.
27. The high-pressure laminate of claim 26 wherein the discrete susceptors are positioned in a predetermined pattern.
28. The high-pressure laminate of claim 1 wherein the susceptor layer is the only layer capable of absorbing electromagnetic energy and generating heat sufficient to melt an adhesive material.
29. A method of making an induction bondable high-pressure laminate said method being the same as conventional methods for producing high-pressure laminates with the exception that a susceptor layer is inserted into the lay-up of resin impregnated layers either as a surface layer or in close proximity to a surface layer, opposite the decorative layer, if present, during the process of assembling the laminate structure prior to curing or forming the same with heat and pressure.
30. The method of claim 29 further comprising the step of applying a heat responsive adhesive to the surface of the formed high-pressure laminate on the surface thereof comprising or in close proximity to the susceptor layer.
31. A method of forming an induction bondable high-pressure laminate comprising bonding a susceptor to a conventional high pressure laminate to the surface of said laminate opposite the decorative surface layer.

32. The method of claim 31 wherein the method further comprises subsequently applying a heat responsive adhesive to the susceptor layer.
33. A method of bonding an induction bondable laminate to a surface said method comprising applying a heat responsive adhesive to the surface or to the bonding surface of the induction bondable laminate of claim 1, placing the induction bondable laminate on the surface and properly aligning the same for the application, subjecting the induction bondable laminate to electromagnetic energy for sufficient time to activate the adhesive, pressing the laminate into the adhesive and allowing the adhesive to set.
34. The method of claim 33 where the adhesive is a hot melt adhesive and the same sets by cooling and solidifying.
35. A method of bonding an induction bondable laminate to a surface said method comprising placing an induction bondable laminate in accordance with claim 17 on the surface and properly aligning the same for the application, subjecting the induction bondable laminate to electromagnetic energy for sufficient time to activate the adhesive, pressing the laminate into the adhesive and allowing the adhesive to set.
36. A method of bonding an induction bondable laminate to a surface said method comprising placing an induction bondable laminate in accordance with claim 19 on the surface and properly aligning the same for the application, subjecting the induction bondable laminate to electromagnetic energy for sufficient time to activate the adhesive, pressing the laminate into the adhesive and allowing the adhesive to set.
37. A method of bonding an induction bondable laminate to a surface said method comprising placing an induction bondable laminate in accordance with claim 24 on the surface and properly aligning the same for the application, subjecting the induction bondable laminate to electromagnetic energy for sufficient time to activate the adhesive, pressing the laminate into the adhesive and allowing the adhesive to set.
38. A method of removing an induction bondable laminate in accordance with claim 1 from a work surface comprising exposing the laminate to electromagnetic energy for sufficient time to activate the adhesive and pulling the laminate from the work surface.
39. The method of claim 38 wherein the adhesive is a hot melt adhesive and activation means melting the adhesive.